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FIFTEEN YEARS OF PHARMACEUTICAL SERVICES IN HUNGARY

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## FIFTEEN YEARS OF PHARMACEUTICAL SERVICES IN HUNGARY

[Following is the translation of an article by Jeno Lazar  
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Ever-increasing demands were made on the pharmaceutical services by the tremendous growth and expansion of the therapeutic-preventive services, the steady increase in the number of insured persons, and the gratifying development of our people's health culture.

Our pharmacists as well as the non-professional workers in the field did their very best to satisfy these demands; their efforts contributed to the development of the Hungarian pharmaceutical services parallel with the socialist development of health affairs.

To meet the growing need and assure an even flow of supply, as well as the economic laws of the system, necessitated planned production and distribution of drugs. Manufacturing and wholesale distribution were taken over and managed by government organs by 1949. Following the re-organization of production and distribution, the nationalization of pharmacies, heretofore privately owned, took effect 28 July 1950. The Pharmaceutical Selling Company, founded in 1949, through its Budapest agency and four branches in other cities, took over the supply of drugs to pharmacies and hospitals. In the interest of dependable and smooth supply, and also because of the great increase in demand, wholesale distribution of drugs was decentralized in 1951.

After having taken care of the conditions basic to planned distribution, our next task was to create the most important foundation for a smooth supply and to build sufficient reserves. The first phases of planned drug supply presented some difficulties, but at this time, with pertinent statistical data available, planning of production is based on foolproof methods. Nevertheless, even today irregularities occur in the planning of certain medicinal products. The planning for demand in new products poses special difficulties, since their therapeutic application is practically unpredictable; at the same time, the introduction of new drugs has considerable effect on the consumption of other products already on the market.

In a word, there still exist temporary deficiencies, but they do not constitute serious difficulties in the continuous supply.

Beyond satisfying the quantitative requirements of the drug supply, the vital and most characteristic endeavor of socialist services is to provide for the best, most modern and most effective pharmaceutical products for the benefit of the sick.

Lately our pharmaceutical industry has been doing its very best to fulfill this requirement. In line with this effort the production of several drugs was undertaken which previously had to be imported from abroad, along with the introduction of many, theoretically new, drugs

(Gastropin, Mydeton, Spiractin, Degranol, etc.). To mention only a few of the first category: Hibernal is designed as a substitute for the foreign import Largactil; Pipolphen for the imported Phenergan; Andaxin in place of Miltown; Gracidin instead of Preludin. There is considerable progress in the production of antibiotics. The most essential of these, such as Penicillin, Streptomycin, Chlorocid (domestic version of Chloromycetin), and Tetran (the foreign Terramycin) are now home produced and exported in considerable amounts. It should be pointed out that the prices of our drugs are extremely low, unlike the prices in capitalist countries. Furthermore, in addition to these low prices, the majority of our population, being insured, can avail itself of these drugs at a token price. Certain special medicinal products are obtainable entirely free, such as Vitamin D and various food preparations and formulae, indispensable in maternal and infant care. Drugs are free for the treatment of venereal diseases, so is insulin for insured diabetics, and [drugs] for the use of industrial apprentices and victims of industrial accidents. Significant expense is incurred by our state in supplying free sera and vaccines to the population. For example, during the polio epidemics of 1957, Salk vaccine obtained from America and Canada was supplied free to those in need, likewise the Sabin vaccine imported from the USSR from 1959 on.

Our people's economy spends more and more on the increasing demand for pharmaceutical products. Below are the sales figures, in million forints:

1951	416.9
1952	515.2
1953	617.7
1954	745.7
1955	790.9
1956	829.0
1957	947.6
1958	1052.1
1959	1257.3

Our social system no longer allows the nefarious practice of the past, when the various insurance organizations (OTI, OTBA, MABI, etc.) [these abbreviations denote separate insurance agencies for workingmen, white collar workers, and employees of the state, counties, and municipalities] offered services of a discriminatory, unequal nature. The broadest scope of modern drug therapy is today available to the working people.

The sum total of drugs prescribed for insured patients tripled, the average price of prescriptions doubled. This means that we provide increasingly expensive drugs in the service of prevention and therapy.

This is how we realize one of the basic requirements of socialist health care: a supply of drugs that is easily accessible to everyone.

Along with satisfying the qualitative demands, we also achieved significant results in the field<sup>of</sup> qualitative development. Any product, or basic material in its progress from production to consumption, is submitted to repeated checks, examinations, and observations. This inspection is designed to ensure a product which will optimally achieve the necessary therapeutic effects, or prevention of disease. It is also one of the contributing factors to the world-wide esteem Hungarian pharmaceutical products enjoy.

## II.

Parallel with the development of medical science, the science of pharmacology made tremendous progress during the past 15 years. Scientific discoveries brought, along with significant, valuable theoretical results, practical measures to be utilized in the field of drug production. Among these we might mention the publication of the Fifth Hungarian Pharmacopeia, which is considered an important scientific contribution of international acclaim and represents the fundamentals of modern pharmacy management and pharmaceutical development. The development of pharmacology, the new materials used in drug therapy, and last but not least, the rapid changes in the methods of pharmacological research justify, and even make imperative, the continuation of the work in connection with the Pharmacopoeia. Thus the editorial work on the Sixth Hungarian Pharmacopoeia was begun by the Editorial Committee under the chairmanship of Elemer Schulek, member of the Academy.

Another proof of the progress of pharmacology is furnished by the recently introduced Fourth Fo-No [meaning unknown and not given in the text], incorporating the most up-to-date requirements of prescription of drugs, the medical version of which contains practical help to physicians active in the health care network.

The publication of the Acta Pharmaceutica Hungarica stimulated pharmacological research in our country. The Medical Schools of the University of Budapest and Szeged organized independent departments for the teaching of pharmacology, where our pharmacists get their training at a much higher level than in the past. A new curriculum for the teaching of pharmacology is being evolved in the interest of further improving the graduate program.

A further proof of the scientific development in pharmacology is seen in the fact that there are pharmacological committees incorporated both in the Academy of Sciences and in the Scientific Council of Health Affairs.

There is ample documentary evidence for the scientific results achieved in the field of pharmacology also in the depth and variety of the lectures read at the Pharmacists' Convention held in October 1959.

Along the scientific progress there is yet another condition for the promotion of pharmaceutical services -- one which may become the basis of socialist drug supply -- and that is the nationalization of pharmacies. The latter move rendered the coordination and unified direction of pharmaceutical work possible.

A condition of satisfactory drug supply is a well-developed network of pharmacies. It is common knowledge that the pharmacy network of the country were considerably damaged by the events of the World War II. The nationalization of the pharmacies occurred only in 1950, and up to that time the owners undertook only the unavoidable work of reconstruction and maintenance. Thus at the time of the nationalization the condition and equipment of the pharmacies were unsatisfactory. One of our main responsibilities in the past as well as in the present is to improve, modernize and rebuild our existing pharmacies.

There are at present 1377 pharmacies in Hungary serving the civilian population; of these, 600 have undergone reconstruction and modernization during the past ten years, and 81 new pharmacies were built. At present there is one pharmacy for every 7,000 inhabitants in the country.

In smaller settlements where there is no pharmacy available, the physicians are provided with "portable" pharmacies. There are approximately 500 such pharmacies operated in the interest of improving the drug supply of the country.

In the course of the modernization of our pharmacy network, provisions were also made to improve the living conditions of the pharmacists. Simultaneously with the rebuilding of the pharmacies, new official residences were designed to conform to the requirements of modern healthful living. This is of special importance in the country, where even today there exist official residences which do not offer ideal living conditions.

In the course of the decentralization of wholesale drug distribution, the 19 megye [county] Pharmacy Centers as well as those supplying the capital were provided with their own stocks, which are kept re-stocked by the Pharmaceutical Selling Company according to the needs of the territories. These stocks, the setting up of which meant a great deal of trouble, have become, due to the large-scale increase in demand, insufficient quantitatively, and there are multiplying problems to be dealt with in storing these drugs. For a while we have used warehouses in Borsod-Abauj-Zemplen megye, and recently in Budapest, to overcome these difficulties. The warehouse built in Budapest has all the modern equipment needed for storing drugs.

In the interest of rendering the territorial supply more secure and to ease the strain on local pharmacies, central Galenian laboratories have been opened in some megyes, the activities of which will be extended in the future.

The territorial supply organization outlined above, by becoming an independent unit, became the basis of distribution of its area. Its supervision and direction had been the direct responsibility of the Ministry of Health, up to 1957.

Beyond the general principle of decentralization, the specific decentralization of the superintendence of drug supply became inevitable as a result of the introduction of territorial health care services. At the same time, the supervision of the drug supply was taken over by the health departments of the [megye] councils. The post of Chief Pharmacist was organized to carry out the direct supervision of the drug supply; the Chief Pharmacists are assigned to the health departments of megye councils.

Simultaneously with the decentralization, the title "Pharmaceutical Company" was discontinued and, befitting the scope of their activities, the organizations were named Pharmaceutical Centers. This title is also designed to indicate that, despite the company structure, these organizations are not commercial undertakings but health organs created for the purpose of supplying the drug needs of their territory.

The question of future pharmaceutical practice emerges in the wake of the spread of drug specialties. There is no doubt that pharmacists nowadays are called upon to prepare medicines much less than in the past, for with the progress of science the nature of drugs is undergoing a significant change. Organic preparations increasingly take the place of inorganic drugs, prevalent at the turn of the century. The number of biological drugs increase as a result of biochemical research, thus promoting the use of drug specialties. This, however, does not necessarily mean a decrease of the importance of pharmacists or pharmacies; on the contrary, the growing scope of materials used in therapy underlines and emphasizes the professional responsibility of pharmacists. In addition, any further decline of individualized medication must be discouraged. While it is true that large scale production of special drugs has its unquestionable advantages, the unjustified use of these drugs is harmful from the point of view of general and therapeutic considerations.

It is expected that the introduction of the new Formulae Normales, a collection of the latest compound formulae in line with modern therapeutic principles, will result in the reactivation of pharmacy preparations. Certain areas of medical practice require that preparations be freshly made, or that there are adjustments in the degree of concentration, making for individualized regimen of medication. This is true for both the friendly and capitalist countries where, primarily in institutional practice, the possibilities of individualized regimens are widely exploited.

Yet another field of activity for the pharmacist is the Galenian laboratory, already mentioned above. The preparation of Galenics requires a high level pharmaco-technological training.

Many pharmacists are employed in the pharmaceutical industry. Here their main field of interest is in the processing of basic materials, that is in the production proper of drugs. There are many other areas of manufacturing where pharmacists are active, the evidence of which may be found in the fact that there is an increasing demand for pharmacists on the part of drug factories.

Outside of public and institutional pharmacies, Galenian laboratories and the drug industry, pharmacists are working in several other fields:

their services are needed in drug inspection, and in chemical, pharmacological, and other laboratory research. The pharmacist is best equipped to carry out the inspection of drugs, and therefore it is natural that they have a preferred role in official control, commercial classification, and other, similar activities connected with drugs.

It is evident that the task of the pharmacist does not merely increase in linear progression with the number of new materials, but is expanding in various directions. Thus, for example, pharmacists will have to be employed in the future in pharmacological research in greater numbers, due to the shortage of manpower.

Prospects are opening up for the employment of pharmacists by the public health-epidemiological stations.

Pharmacists need to be involved to a larger extent in the work of enlightenment in health matters. Pharmacists, by dint of their training, can assume an important role, especially in the villages, in raising the living conditions and health culture of the rural population, since tens of thousands of working people visit pharmacies daily.

The above listed functions of pharmacists will have a decisive effect on the curriculum of training. The demands of the various fields mentioned may be met by broadening the scope of instruction in biology, biochemistry, pharmacology, toxicology, and industrial technology, along with instruction in drug inspection and pharmaco-technology.

The pharmacist is expected to become a highly trained specialist of drugs in order to promote the development of pharmaceutics. The way we see it, the rapid medical progress will require the physician to look to the pharmacist for expert help in pharmacology and drug therapy.

With this purpose in mind, we organized the activist network for the dissemination of pharmaceutical information. The pharmacists involved in this work have received training in anatomy, biochemistry, and pharmacology. Their task is to furnish information concerning the current problems of our drug supply, the action mechanisms of new preparations, as well as problems of drug economy, at medical meetings, extension courses, etc. The three editions of a volume entitled Guide to Prescription of Drugs as well as a periodical, Our Drugs are also designed to facilitate the work of physicians.

The volume of pharmacy work has swelled considerably since the nationalization of pharmacies. However, the number of pharmacists did not keep pace with the increase in the drug trade. The number of pharmacists on 31 December 1951 was 2433; today it is 3380.

In view of the fact that we may expect further increase in demand due to the socialist development of agriculture, and also because enrollment of students could be adjusted to meet the growing need only in the knowledge of the pertinent data (at present there are 220 first-year students enrolled in the two departments of pharmaceutics), we now aim to increase the number of pharmacist-technicians in the interest of ensuring undisturbed drug supply and to relieve the pharmacists' burdens. At this point 500 high school graduates spend their compulsory one-year practical studies in various pharmacies, which will be followed by another year of theoretical training.

In the interest of keeping up the standards of drug services, the university curriculum will be extended to five years instead of four and a half as in the past. We also plan the establishment of an independent Pharmaceutical Institute for the purpose of advancing the pharmaceutical sciences. Considerable sums are spent on the expansion and modernization of the pharmacy network. Thanks to the help of our government, and with the improved conditions in all fields of pharmaceutical service, we are in a position to fulfill the tasks assigned to us in the construction of socialist health care.

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